

AMENDMENTS TO THE CLAIMS

---

56. (Currently amended) A method for drug discovery comprising the steps of:  
providing a molecular descriptor array having a plurality of definable  
locations,

providing a pharmaceutically active compound to the molecular descriptor  
array, and monitoring the response of the molecular descriptor array to the  
pharmaceutically active compound, thereby developing a response profile for the  
pharmaceutically active compound,

subsequently providing in series related compounds to the molecular  
descriptor array, monitoring the response of the molecular descriptor array to the  
related compounds, thereby developing further response profiles for the related  
compounds, and

providing a test compound to the molecular descriptor array, monitoring the  
response of the molecular descriptor arrays to the test compound and analyzing the  
response of the test compound relative to the response profiles for the  
pharmaceutically active compound and related compounds so as to predict expected  
response of the test compound.

---